2019 California Building Code (CBC) Changes

SUMMARY

Most of the significant changes are modifications to existing requirements or additional requirements. Several modifications are clarifications to align the CBC with the CFC and the 2010 ADA Standards. NOTE: Because most Master Plan Dwellings are designed to the CRC, the majority of CBC changes do not affect the master plans.

SIGNIFICANT CHANGES

	0111105	CBC SECTION/TABLE		MASTEI IMPA	
NEW	- CHANGE	NUMBER	COMMENTARY	YES	
	\boxtimes	202	Definitions. Common Place of Public Amusement, Greenhouse, Repair Garage have been added. And clarification to Sleeping unit, and Common Path of Egress Travel.		
\boxtimes		302.1	Classification Of Outdoors Areas. Occupied roofs are to be assigned one or more occupancy classification consistent with the classification of uses inside the building. Based on fire and life safety hazards posed by the rooftop activities. And shall comply with section 503.1.4.		\boxtimes
		310.3.2	Residential Group R-2.2: a new classification is introduced for residential occupancies operated by California Department of Corrections and Rehabilitation (CDCR)in a community located facility that provides housing and community based services for nontransient ambulatory participants in a nonlicensed facility with 24/7 supervision.		\boxtimes
		303.4, 309.1 and 312.1.1	Greenhouse Occupancies. Greenhouses occupancy classifications are clarified. Greenhouses for the conservation and exhibition of plants that provide public access are "A-3" occupancies. Greenhouses for display and sale of plants that provide public access are "M" occupancies. Greenhouses not otherwise classified are 'U" occupancies.		\boxtimes
	\boxtimes	310.4	Residential group R-3. Modifies occupancy classification to consider dormitories with an occupant load of 16 or less and transient lodging houses with an occupant load of 10 or less as R-3.		
	\boxtimes	310.4.2	Owner-Occupied lodging Houses. Owner-occupied lodging houses with 10 or fewer total occupants and that contain no more than five guest rooms may be permitted to be designed in accordance with the California residential Code (CRC).		\boxtimes
	\boxtimes	311.1.1	Classification of Accessory Storage Spaces. Regardless of size, storage rooms and areas that are accessory to other uses are to be classified as part of the occupancy to which they are accessory. The 100 S.F. limit has been removed. And the limit on aggregating such areas has been removed.		\boxtimes

NEW	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	IMP	R PLAN ACT - NO
	\boxtimes	311.2	Classification of Self-Service Storage Facilities. Self- service Storage facilities (mini-storage) are now classified as group S-1.		
	\boxtimes	312.1	Classification of Communication equipment Structures. Communications structures with a gross floor area of less than 1,500 S.F. are now classified as group U. Only this U classification has an area limit in the definition.		\boxtimes
		403.2.1.1	Type of Construction in High-Rise buildings. The reduction of the fire-resistance rating of the building elements in type IB construction to the fire-resistance rating of type IIA construction as shown in table 601 under the 2019 CBC is not allowed for groups H-2, H-3 and H-5 (in addition to groups F-1, M and S-1).		\boxtimes
	\boxtimes	404.6	Enclosure of Atriums. Section 404.6 item4 clarifies that a fire barrier is not required between the atrium and the adjoining spaces where the atrium is not required to be provided with a smoke control system.		
	\boxtimes	406	Motor Vehicle-Related occupancies. The section regarding motor vehicle related occupancies have been reorganized to group all provisions common to all these uses into one section to avoid repetition. There are no major substantive changes. Items include: clear heights, accessible parking spaces, floor surfaces and slopes, elevation of ignition sources, relation to sleeping rooms.		\boxtimes
	\boxtimes	406.3	Regulation of private Garages. Parking structures that meet the definition of private garages are now permitted to be constructed under the provisions of a public garage.		\boxtimes
	\boxtimes	406.6.2	Ventilation of Enclosed Parking Garages. Chapters 4 and 5 of the California Mechanical Code (CMC) are now specifically referenced as providing the mechanical ventilation for enclosed parking garages.		
	\boxtimes	407.2.6	Nursing Homes: Coordination of cooking facilities in nursing homes with existing California state laws.		\boxtimes
		407.5.1	Smoke compartment size. Stories to be divided into smoke compartments with an area not more than 22,500 square feet in group I-2. This modification coordinates the requirements of the CBC with the requirements of NFPA 101.		
	\boxtimes	407.5.4	Required egress from smoke compartments. In group I-2 occupancies, any smoke compartment without an exit must now provide access to at least 2 other smoke compartments.		\boxtimes

NEW -	· CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTE IMP/ YES	4CT
		420.10	 Group R-2 dormitory cooking facilities. Cooking areas may be provided in dormitories if: Appliances limited to ovens, cooktops, ranges, warmers, coffee makers and microwaves. In approve locations Range hood per CMC Hood protected per 904.13 with fire suppression. 		\boxtimes
\boxtimes		422.6	Electrical systems. In ambulatory care facilities, essential electrical systems are now required to be designed and constructed in accordance with the provisions of chapter 27 and NFPA 99.		
	\boxtimes	423	Storm Shelters. The section has been revised to provide more clarifications regarding the location and construction of storm shelters, specifically in schools.		\boxtimes
		424.1	Children's Play structures. Children's play structures requirements have been revised to include any structure that is 10 feet in height or 150 square feet in area. Previously the requirements would only apply to play structure that exceed both the height and the area specified in the code.		\boxtimes
		427	Medical Gas Systems . The CFC Medical gas system requirements related to building construction have been replicated in the CBC.		
	\boxtimes	503.1 and 706.1	Building Height and Area Limitations. The use of a fire wall is now strictly limited to the determination of permissible types of construction and allowable area.		\boxtimes
		503.1.4	Occupied Roofs. A roof level may be an occupied roof provided the occupancy of the roof is an occupancy that is permitted by table 504.4 for the story immediately below the roof. The area of the occupied roof is not to be included in the building area. Exceptions: 1. The occupied roof occupancy is not limited to the occupancies allowed on the story immediately below the roof when the building is sprinklered 2. Assembly occupancies are permitted on roofs of open parking spaces of type I and type II construction		\boxtimes
		505.2.1.1	Aggregate areas of mezzanines and equipment platforms. Where both a mezzanine(s) and equipment platform(s) are located in the same room, the general limitation for mezzanine cannot be exceeded when applying the 2/3 allowance for equipment platforms.		
		Table 506.2	Type VB "U" occupancy Greenhouses. Per footnote "i" unsprinklered type VB "U" occupancy greenhouses may be 9,000 square feet in allowable area, which is consistent with those greenhouses classified as group B, M., F-2 and E of type VB construction.		\boxtimes

NEW -	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	IMP	R PLAN ACT - NO
		507.4	Sprinklers in unlimited Area Group A-4 buildings. The sprinkler omission for indoor Group A-4 unlimited area buildings now specifically excludes storage rooms, press boxes, concession booths and other spaces ancillary to the sport activity space.		\boxtimes
		508.3.1.2	Group I-2, condition 2 occupancies. Additional limitations have been added to nonseparated occupancy buildings where one of the occupancy is a Group I-2, Condition 2 hospital space.		
		508.4.1 and Table 508.4	Separate occupancies versus Fire Area Separation. This section clarifies that fire separations for mixed- occupancy buildings and those used for fire area purposes address different concerns and the most restrictive requirements apply.		\boxtimes
	\boxtimes	Table 509	Incidental uses. The incidental use for stationary storage batteries has been revised to be consistent with the CFC and the requirements for transformers and electrical installations to the CEC.		\boxtimes
		510.2	Vertical offsets in podium buildings. Under the 2019 CBC, Vertical offsets are allowed in the horizontal fireresistance-rated separation for "podium buildings" as long as the vertical offsets and the structure supporting the vertical offset shall have a fire-resistance rating not less than 3 hours.		
		Table 601, Note b	Fire protection of structural roof members. All portions of the roof construction, including primary structural frame members, are now selectively exempted from the requirements of Table 601 where every portion of the roof construction is at least 20 feet above the floor below.		\boxtimes
	\boxtimes	602.3, 602.4.1	FRT wood sheathing in exterior wall assemblies. Clarifies that fire retardant wood sheathing as well as wood framing is permitted in exterior walls of type III and IV buildings with a maximum 2-hours rating.		
	\boxtimes	704.2, 704.4.1	Column protection in light-frame construction. Code now states that single story columns located between the top and bottom plates may rely on wall membrane fire protection. Does not apply to continuous columns. Applies to both wood and steel light framing.		\boxtimes
		704.6.1	Secondary attachments to structural members. Where primary and secondary structural steel members require fire protection, secondary attachments to those structural members shall be protected with the same fire resistive material and thickness as required for the structural member. The protection shall extend away from the structural member a distance of not less than 12 inches, or shall be applied to the entire length when the attachment is less than 12 inches long. When an attachment is hollow and the ends are open, the fire resistive material and thickness shall be applied to both exterior and interior of the hollow steel attachment.		

NEW	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTEI IMP/ YES	ACT
	\boxtimes	Table 705.2	Projections. The minimum required separation between the edge of a projection and the line used to determine the fire separation distance has been substantially decreased.		\boxtimes
	\boxtimes	705.2.3, 705.2.3.1	Combustible Projections. The construction requirements for balconies, porches, decks, bay windows, and oriel windows have been relocated from Section 1406 to 705.2.3.		
\boxtimes		705.2.3.2	Vents. [SFM] Vents required by Section 2304.12.2.6 in fire rated exterior balconies or elevated walkway surfaces shall be designed where the voids created at the intersection of the exterior curtain wall and the balcony floor are sealed with an approved material or system to retard the interior spread of flame, hot gases and products of combustion. Rated assemblies shall comply with Section 715. Ventilation openings shall comply with WUI requirements where applicable. Balconies shall comply with the fire sprinkler protection as required by 903.3.1.1 or 903.3.1.2 and the reference standard.		\boxtimes
	\boxtimes	705.8.1	Measurement of fire separation Distance for opening protection. Clarifies that the allowable area of openings in fire-resistance-rated exterior walls is to be based on the fire separation distance for each story, determined individually, in the same manner as required for wall rating.		\boxtimes
		706.1.1	Party walls not constructed as fire walls. A party wall located on a property line is no longer required to be a fire wall provided that the combined height and area buildings on each side comply with the height and area limitations of Chapter 5.		\boxtimes
		706.2	Structural Stability. Permits maximum 3/4" thick wood floor sheathing to extend through the gap separating double fire walls in Seismic Design categories D through F.		\boxtimes
		708.4	Fire partition continuity. There are a number of subtle changes to the connection and continuity criteria for "Fire Partitions". These occur in many places such as R occupancy separation walls, tenant separations, corridors and elevator lobbies among other uses.		\boxtimes
		708.4.2	Fireblocks & draftstops in combustible construction. Fireblocking and draftstopping requirements for fire partitions of combustible construction have been consolidated and modified.		
	\boxtimes	713.8.1	Membrane penetrations of shaft enclosures. Membrane penetration not related to the purpose of a shaft enclosure are no longer prohibited from penetrating the outside of the enclosure.		\boxtimes
		716.2.6.5	Delayed-action closers. Self- closing doors that are not required to be automatic closing may be equipped with delayed action closers.		\boxtimes
	\boxtimes	803.1.1, 803.1.2	Interior wall and ceiling finish materials. Interior wall and finish testing criteria have been reorganized to enhance their application and enforcement.		\boxtimes

NEW	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	IMP	R PLAN ACT - NO
	\boxtimes	803.3	Heavy timber exemption. Materials considered heavy timber construction must now comply with interior finish requirements where exposed in interior exit stairways, interior exit ramps and exit passageways.		- NO
		803.11, 803.12	Laminated products on wood backing. New sections address laminated products over wood substrates. Section 803.11 covers factory-produced materials and section 803.12 covers laminates applied on-site over wood substrates. The test criteria are to be per NFPA 286 in § 803.1.1.1, with the materials meeting the flame spread indexes for ASTM E84 or UL 723		
		901.6.2	Integrated fire protection systems testing. NFPA 4 Standard for Integrated Fire Protection and Life Safety Systems Testing to ensure that where multiple fire protection systems or life safety systems are integrated, they must be evaluated as an integrated whole.		\boxtimes
		902	Fire pump and riser room size. A number of prescriptive requirements have been added regulating the design and construction of automatic sprinkler system riser rooms and fire pump rooms.		
		903.2.1	Automatic fire sprinklers in group A occupancies. The extent to which automatic fire sprinklers are required in multistory Group A occupancies has been clarified.		
		903.2.3	Automatic fire sprinklers in group E occupancies. Criteria for occupant load threshold and location within the building have been added as conditions that could require sprinkler protection in a Group E occupancy.		\boxtimes
		903.2.16	Group L occupancies. Group L occupancies are now required to be designed with higher sprinkler density. The revision also clarifies that the remainder of the floor, not classified as group L to be designed as required by NFPA 13.		\boxtimes
	\boxtimes	903.3.1.1.2	Bathrooms. Fire sprinklers are no longer required in Group R-4 bathrooms where the bathroom does not exceed 55 sf.		\boxtimes
		903.3.1.2.3	Attics. Sprinkler protection or acceptable alternate methods for the fire protection of attics are now addressed for mid-rise buildings housing multi-family residential buildings.		\boxtimes
		904.13	Domestic cooking systems. Where domestic-type cooking operations are present in I-2, I2.1 occupancies and Group R-2 college dormitories, an automatic fire extinguishing system is now required with the required hood over any cooktop or range.		\boxtimes
\boxtimes		904.14	Aerosol fire-extinguishing systems. Aerosol Fire Extinguishing systems are now addressed through applicable references in Sections 901 and 904.4 and NFPA 2010.		\boxtimes

NEW	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	IMP	R PLAN ACT - NO
	\boxtimes	905.3.1	Standpipe systems. Class III standpipe systems are now required in buildings having four or more stories above or below the grade plane, regardless of the building height. And in buildings where the highest story is 30 feet above the grade plane.		\boxtimes
		905.4	Location of class I standpipe. Class I standpipe locations revised to be at the main landing (not intermediate landings) with the exception that one may be installed in an open corridor between open stairs that are 75 feet apart or less.		\boxtimes
	\boxtimes	907.2.1	Fire Alarm in group A occupancies. Additional requirement regarding installation of manual fire alarm system in Group A occupancies with an occupant load of more than 100 when located above or below the level of exit discharge.		\boxtimes
	\boxtimes	907.2.10	Group R-4. Fire alarm system and automatic smoke detection system is no longer required in Group R-4 occupancies. The requirements have been deleted.		\boxtimes
	\boxtimes	Table 1004.5, 1004.8	Occupant load calculations in Business use areas. The method of calculating the occupant in business areas has been revised: Business areas raised from 100 gross (square feet/occupant) to 150 gross. Concentrated use business areas: 50 square feet /occupant or actual load.		
		1006.2.1, Table 1006.2.1	Egress based on occupant load and common path of egress travel distance. The allowances for single-exit Group R spaces have been reformatted and the approach to accumulating loads from adjacent spaces discharging through lobbies has been clarified. Number of exits from a lobby does not need to be based on cumulative occupant loads BUT the exit width does. Spaces with one exit for R-2, 3 and 4 Occupancies increased from 10 to 20.		\boxtimes
	\boxtimes	1006.3, 1006.3.1	Egress from stories or occupied roofs. The determination of egress requirements has been clarified where the occupants must travel to an adjacent story to reach a complying exit or exits. In summary, the section states that the number of exits, or access to exits, for each story is to be based solely on the occupant load for that story.		\boxtimes
		1008.2.3	Exit discharge illumination. Where a means of egress leads to a safe dispersal area per CBC section 1028.5, that area must be lit with 1 foot-candle (11 lux) of illumination.		\boxtimes
	\boxtimes	1008.3.5 <i>,</i> 1008.2.2	Emergency illumination in group I-2 occupancy. In group I-2 occupancies, the required exit illumination level of 0.2 footcandle must now be available upon the failure of a single lamp in a luminaire.		

NEW	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTE IMP YES	
	\boxtimes	1009.7.2	Protection of exterior areas of assisted rescue. When the building is protected with an automatic fire sprinkler system, fire-rated exterior walls with fire-protected openings is no longer required between the area of assisted rescue and the interior of the building.		
		1010.1.4.4	Locking at Educational Occupancies. In Group E and Group B educational occupancies, egress doors from classrooms and other occupied rooms are permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met: 1. The door is capable of being unlocked from outside the room with a key or other approved means. 2. The door is readily openable from within the room to comply with CBC section 1010.1.9. 3. Modifications may not be made to listed panic hardware, fire door hardware, or door closers.		\boxtimes
	\boxtimes	1010.1.9.8	Delayed egress locking systems in group E classrooms & courtrooms. Delayed egress locks are now permitted on egress doors serving Group E classrooms with an occupant load of less than 50 and to secondary exits or exit access doors serving courtrooms.		\boxtimes
	\boxtimes	1010.1.9.12	Locks on stairway doors. Previously limited to buildings 4 stories in height, stairways are permitted to be secured from the stairway side where there is a system to allow emergency personnel to simultaneously unlock all doors.		
		1010.3.2	Security access turnstiles. New conditions of use are now provided to evaluate security access turnstiles that are located in a manner to obstruct a means of egress.		\boxtimes
	\boxtimes	1015.6, 1015.7	Fall arrest at mechanical equipment Definitions. Guards are to be provided where various components that require service are located within 10 feet of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above grade. Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z 359.1 are installed.		\boxtimes
		1017.3, 202	Measurement of egress travel distance. Language has been revised to clarify that the common path of egress travel limitations must be applied to each room or space on every story.		\boxtimes
	\boxtimes	1023.3.1	Stairway extensions. When a stairway and connecting exit passageway are pressurized, there is no longer a requirement to separate the two components.		

NEW -	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTE IMPA	
		1023.5, 1024.6	 Exit Stairway& Exit Passageway Penetrations. Penetrations into or through interior exit stairways and ramps are prohibited except for the following: Equipment and ductwork necessary for independent ventilation or pressurization. Fire protection systems. Security systems. Two-way communication systems. Electrical raceway for fire department communication systems. Electrical raceway serving the interior exit stairway and ramp and terminating at a steel box not exceeding 16 square inches. 		<u>- NO</u>
	\boxtimes	1025.1	Penetrations may be made for items that serve the enclosure itself Luminous egress path marking in group I occupancies. Luminous path marking is no longer		\boxtimes
		1025.1	required in high-rise buildings of Groups I occupancies.		
	\boxtimes	1026.4, 1026.4.1	Refuge areas for horizontal exits. The method of determining the refuge area of a horizontal exit has been modified to allow a more appropriate determination of the occupant load assigned to the refuge area. The capacity is now determined by the total occupant load of the adjoining compartment or the door capacity, whichever is less.		\boxtimes
	×	1029.6, 1029.6.3, 202	Open-air assembly seating. The various assembly seating methods have been clarified through the introduction of a new definition for open-air assembly seating and an expanded definition for smoke-protected assembly seating. Open air seating is now essentially "smoke protected seating" and accrues the benefits traditionally assigned to smoke protected seating.		\boxtimes
		1030.1	Emergency escape and rescue openings. Occupancies (including R-2.1) where emergency escape and rescue openings are required has been clarified and the minimum number required in a residential basement has been revised.		\boxtimes
	\boxtimes	11B-203.8	Residential facilities. The term "public housing" was repealed to align Chapter 11B with the 2010 ADA Standards for Accessible Design provisions.		\boxtimes
	\boxtimes	11B-206.2.19	Pedestrian street crossings. This code change restores the scoping for curb ramps at street intersections from prior editions of the code.		\boxtimes
\boxtimes		11B-207, 11B-207.1	Accessible means of egress. An exception is added under section 11B-207 that states the following: "accessible means of egress are not required to be provided in existing buildings."		\boxtimes

NEW -	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	IMP.	R PLAN ACT - NO
	\boxtimes	11B-213, 11B-213.3.6	Bathing facilities. This section is amended to include scoping for the locations where transfer type showers are allowed.		\boxtimes
		Table 11B-224.2	Guest rooms with mobility features. The table is revised to align Chapter 11B with the 2010 ADA Standards for Accessible Design. Footnotes have been added to clarify the requirements for bath tubs, transfer type showers and roll-in showers.		\boxtimes
	\boxtimes	11B-233, 11B-233.1	Public housing facilities. The title of this section is amended to repeal the term "residential" and replace it with "public housing". In Section 11B-233.1 "available for public use" has been repealed. Under section 11B-233 many parts are amended to repeal the term "public housing facility" to align with the 2010 ADA Standards for accessible design.		
\boxtimes		11B-248,11B- 248.1,11B-248.2	Common use areas and employee work areas. Sections 11B-248.1 and 11B-248.2 are added to clarify the requirements for access compliance in common use and employee work areas.		
\boxtimes		11B-249, 11B-249.1, 11B-249.1.1, 11B-249.1.2	Adult changing facilities. New scoping section is added for adult changing facilities in response to Assembly Bill 662 (2015-2016)/California Health and Safety Code section 19952.8.		\boxtimes
	\boxtimes	11B-405.9.2	Ramps. The section is revised to clarify the requirement for ramp edge protection to alleviate possible conflicts with the 2010 ADA Standards for Accessible Design.		\boxtimes
\boxtimes		11B-502.5	Parking spaces. An exception is added in this section to allow 80 inches of vertical clearance in existing parking structures excluding van spaces, access aisles and vehicular routes serving them.		\boxtimes
		11B-608.2.1	Shower compartments Transfer type showers. The section is amended to that allows transfer type shower compartments in Chapter 11B. Scoping is included with a reference to Section 11B-213.3.6 for specific locations where transfer type shower compartments are allowed.		
		11B-608.3.1	Shower compartments Grab bars. This section is added to include the technical requirements for grab bars in transfer type shower compartments.		
	\boxtimes	11B-608.4	Shower compartments Seats. This section is amended to provide the technical provision that requires seats in transfer type shower compartments.		\boxtimes
\boxtimes		11B-608.5.1	Shower compartments Controls. This section is added to include the technical requirements for controls in transfer type shower compartments.		\boxtimes
	\boxtimes	11B-608.7	Shower compartments thresholds. This section is amended to include technical provisions for thresholds in transfer type shower compartments.		\boxtimes
	\boxtimes	11B-610.3	Shower compartments Seats . This section is amended to provide the technical provisions for seats in transfer type shower compartments.		

NEW - 0	CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTEI IMP/ YES	
		11B-812.8.7	Electric vehicle charging stations. This section is amended to clarify the requirements for signs located in circulation paths rather than an accessible route.		\boxtimes
\boxtimes		11B-813	Adult changing facilities. The entire section is a new addition to Chapter 11B to provide the technical provisions for adult changing facilities.		
	\boxtimes	1206.2, 1206.3	Sound transmission. Sound transmission criteria are established using ASTM test for both airborne sound (ASTM E 90) and for structure-borne sound (ASTM E 492). Now, the sound transmission class of walls, partitions, and floor-ceiling assemblies may be established by engineering analysis based on a comparison of tested wall partition, and floor-ceiling assemblies having sound transmission class ratings as determined by the test procedures set forth in ASTM E90 by comparing with other tested assemblies.		
	\boxtimes	Table 1404.2	Stone and masonry veneer thickness. The minimum required thickness of masonry and stone veneer coverings has been updated to align with current industry standards.	\boxtimes	
	\boxtimes	1404.18	Polypropylene siding. Polypropylene siding is now specifically permitted for use on exterior walls of any type of construction if it meets defined fire test criteria. However, it is limited to exterior walls located in areas where the wind speed does not exceed 100 miles per hour and the building is less than or equal to 40 feet in exposure C or when other provisions of the CBC allow its use. See CRC R703.14 for other requirements.	\boxtimes	
		1504.3.3	Metal roof shingles. Metal roof shingles are now addressed separately from other metal roof panel systems with reference made to applicable standards for the labeling and testing of wind resistance for shingles.		\boxtimes
	\boxtimes	1507.1	Roof underlayment. This section has been reorganized to put underlayment and ice barrier requirements for various roofing materials into a single section. New tables have been added addressing type, application and fastening.		
		1507.18	Building-integrated photovoltaic panels. Building-integrated photovoltaic panel systems now have specific requirements as roof covering material in the CBC.	\boxtimes	
	\boxtimes	1603	Construction documents. The construction document requirement for environmental and special loads have been updated for rain, snow and wind forces and their components. The roof slope factor, Cs, has been added to the required list of snow load data and factors. Rain load data is added to the list of design loads required on construction documents. Special loads are clarified while wind load terminology is updated to match ASCE 7.	\boxtimes	
		1604.3.7	Framing supporting glass. Limits to the deflection of framing which supports glazing have been added to section 1604.3. The new section clarifies the allowable deflection of		

NEW	- CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTE IMP/ YES	ACT
			exterior wall framing members supporting the glazing on the basis of the framing members spans.		
\boxtimes		1604.5.1	Multiple occupancies. The provisions addressing occupancies within a structure now include an exception exempting buildings in their entirety from needing to qualify for a higher risk category when a storm shelter is part of the structure.		
\boxtimes		1604.10	Loads on storm shelters. The development of the loads for storm shelters is to be based on ICC 500 which provides wind speeds for tornado and hurricanes shelters design using ASCE 7 load combinations.		
	\boxtimes	Table 1607.1	Deck Live Load. Table 1607.1 is now consistent with provisions in the 2010 and 2016 editions of ASCE 7 for minimum uniformly distributed live loads on decks and balconies by increasing the deck live load to one and one-half the live load of the area served.	\boxtimes	
	\boxtimes	Table 1607.1	Live load reduction. Table 1607.1 now clarifies where heavy live loads of 100 pdf or greater may be reduced. Footnotes have added and modified to clarify where the reductions apply.		
\boxtimes		1607.15.2	Fire walls. The minimum lateral load that fire wall are required to resist has been established at five pounds per square foot.		\boxtimes
		1609	Wind loads. Section 1609 now has updated wind speed maps, including maps for the State of Hawaii. Terminology for describing wind speeds has been changed again, with ultimate design wind speeds now called basic design wind speeds.		
	\boxtimes	1613	Earthquake loads. The site coefficients contained in the CBC have now been brought into alignment with the newest generation of ground motion attenuation equations.		
	\boxtimes	1613.2.1	Seismic maps. The CBC seismic maps have been updated to match new maps in the 2015 NEFRP Provisions and 2016 ASCE 7 standard.		
		1615, 1604.5	Tsunami loads. There are many coastal communities in the western United States which need tsunami-resistant design of critical infrastructure and essential facilities. New CBC Section 1615, Tsunami Loads, has been added to address design of these facilities.		
\boxtimes		1704.6	Structural observations for structures. Section 1704.6.1 has been added requiring structural observation of buildings that are considered a high-rise or assigned to Risk Category IV.		
	\boxtimes	1705.5.2	Metal-plate connected wood trusses. Five-foot-tall wood trusses requiring permanent bracing now require a periodic special inspection to verify that the required bracing has been installed.	\boxtimes	
		1705.12.1, 1705.13.1	Structural steel. The exception for inspection of seismic force-resisting systems have been clarified for structures in moderate and high seismic regions.		\boxtimes

NEW -	- CHANGE	CBC SECTION/TABLE	COMMENTARY	MASTE IMP/	ACT
		NUMBER 1705.12.6	Special inspections for fire sprinkler clearance. Special inspection is now required for minimum clearance of fire sprinkler components to structure and to MEP equipment in Seismic Design Category C, D, E or F for: 1. Minimum clearances have been provided as required by ASCE/SEI 7 2. A nominal clearance of not less than 3 inches is to be provided between fire protection sprinkler system drops and sprigs to adjacent structure.	YES	<u> </u>
	\boxtimes	1804.4	Site grading. An exception for impervious surfaces is added to allow slopes less than 2% near doors to meet the egress requirements in Chapter 10.		\boxtimes
	\boxtimes	1807.2	Retaining walls. The requirement for consideration of a keyway in the sliding analysis of retaining wall has been deleted from Section 1807.2.		\boxtimes
	\boxtimes	1810.3.8.3	Precast prestressed piles. Equations under section 1810.3.8.3 addressing precast prestressed piles have been updated.		\boxtimes
	\boxtimes	1901.2	Plain and reinforced concrete. A new requirement for the use of ASCE 7 Section 14.2.4 has been established for the design of precast concrete diaphragms in high seismic regions.		\boxtimes
	\boxtimes	2207.1	Steel Joists. The 2015 edition of the combined SJI-100, Standard Specification for K-Series, LH-series, and DLH-Series Open Web Steel Joist and Joist Girders, is the new referenced standard for steel joists.		\boxtimes
\boxtimes		2209.2	Cantilevered steel storage racks. The cantilevered storage rack standard, RMI ANSI/MH 16.3, has been added to clarify the characteristics, essential differences, and requirements for cantilevered storage racks.		\boxtimes
	\boxtimes	2211	Cold-formed light-frame construction. The 2015 edition of AISC standards for cold-formed steel, including AISC S240, AISI S400, and AISI S202, have been referenced in the 2019 CBC.	\boxtimes	
		Table 2304.9.3.2	Mechanically laminated decking. A new alternative fastener schedule for construction of mechanical laminated decking has been added to the 2019 CBC giving equivalent power driven fasteners for the 20 penny nail.	\boxtimes	
	\boxtimes	Table 2304.10.1	Ring shank nails. The 2019 CBC and CRC are now aligned by requiring 8-penny common or ring shanks nails when nailing 6 inches and 12 inches on center for roof sheathing.		
	\boxtimes	2304.10.5	Fasteners in treated wood. Staples in preservative- treated wood and fire-retardant-treated wood are now required to be made of stainless steel.		
	\boxtimes	2304.11	Heavy timber construction. Heavy timber provisions in Chapter 23 have been reorganized and information about dimensional equivalencies has been relocated from Section 602.4 to Section 2304.1.		\boxtimes

NEW - CH	HANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO	
		2304.12.2.5, 2304.12.2.6	 Slopes and vents at decks and roof supports. Per section 2304.12.2.5, the impervious moisture barrier system protecting the structure supporting floors must provide positive drainage of water that infiltrates the moisture permeable floor topping. Per section 2304.12.2.6, enclosed framing in exterior balconies that are exposed to rain, snow, or water are to be provided with openings that provide a net free cross-ventilation area not less than 1/150 of the area of each separate space between framing. 	<u>⊠</u>	
		2308.5.5.1	Single headers in conventional framing. The conventional wood framing provisions now allow single headers under certain limited conditions with small spans to allow for provision of increased wall insulation.		
		2407.1.2	Structural glass baluster panels. Structural glass baluster panels are to have an attached top rail. The top rail must be supported by at least three glass baluster panels. It must remain in place if one glass baluster panel fails. Per exception, an attached top rail is not required where the glass baluster panels are made of laminated glass with two or more glass plies of equal thickness and of the same glass type.	\boxtimes	
	\boxtimes	2603.2.1	Labeling of Foam Insulation without flame retardants. Establishes labeling requirements for polystyrene foam insulation.		
		2603.13	Cladding over foam sheathing at wood framing. Provisions for sheathing over foam sheathing have been introduced into the CBC from the California Residential Code. This section addresses fastening siding over thick foam insulation on the exterior of the building. Two tables include fastening requirements based on whether furring is provided under the siding or not.	\boxtimes	
		3001.2	Accessible emergency elevator communications. Additional 2-way communications capabilities are now required at accessible elevators for use by persons with hearing & speech disabilities that: 1. Is a visual text-based and a video- based 24/7 live interactive system. 2. Is fully accessible by the deaf, hard of hearing and speech impaired, and includes voice-only options for hearing individuals. 3. Has the ability to communicate with emergency personnel utilizing existing video conferencing technology, chat/text		\boxtimes

NEW - 0	CHANGE	CBC SECTION/TABLE NUMBER	COMMENTARY	MASTER IMPA YES	ACT
	\boxtimes	3006.2.1	Corridors at elevator hoistway openings. Where elevators open into a corridor required to be fire-resistance rated elevator hoistway openings are to be protected per section 3006.3, which has three options: 1. Elevator lobbies separating the elevator lobby from the corridor. 2. Additional doors that close over the elevator doors. 3. Pressurization of the elevator hoistway per section 909.21 to prevent smoke from entering.		
		3007.1	Fire service access elevator travel. When required by section 403.6.1 fire service access elevators need to serve only levels at or above the lowest level of fire department access. Thus, levels below the lowest level of fire department access need not be served by fire service access elevators.		
		3008.1.1	Required number of occupant evacuation elevators. A reduction in the minimum number of elevators that must be considered as occupant evacuation elevators now reflects a more reasonable performance-based approach while still retaining the capacity to evacuate a high-rise building more quickly than stairs alone.		
	\boxtimes	3109.2	Swimming pool safety act. For ease of use, the act has been included under the CBC by the California Building Standards Commission.		\boxtimes
	\boxtimes	3310.1	Stairways in building under construction. At least one temporary or permanent stairway need to be provided in a building under construction once the building reach a height of 40 feet measured from the lowest level of fire department vehicle access.		\boxtimes